Self-determination and Practitioner Adherence: Closing the Treatment Gap

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Outline

- Defining the treatment gap
  - Clinical Preventive Services
  - Tobacco dependence
- Self-determination & adherence
  - Practitioner adherence
  - Patient adherence
- Implications of SDT for adherence
  - Medical ethics and “autonomous adherence”
  - Redefining adherence may increase it

Treatment Gap

- The “treatment gap” represents the difference between what we know improves health and what health related behaviors patients and practitioners do.
  - <50% of adult smokers receive treatment
  - 25% of women >50 report no mammogram 2 y
  - 41% adolescents not vaccinated by 13 yo

Clinical Preventive Services Priorities

- US Prev. Services Task Force have found 50 services effectively improve health
- Adult patients have average of 12 risk factors requiring 24 preventive services
- Knowledge that an intervention is effective isn't sufficient to set priorities for clinicians. They need to know what services will provide the greatest benefit

Coffield, AJPM, 2001

Clinically Preventable Burden (CPB) & Cost Effectiveness (CE)

- CPB is the product of the burden of disease targeted by the service and its effectiveness and is represented as Quality Adjusted Life Years (QALY)
  - Proportion of disease and injury prevented if delivered to 100% of the target population
- CE=(costs of prevention - costs averted) divided by the QALY's saved expressed in 1995 dollars

Coffield, AJPM, 2001

CPB and CE

CPB QALYs Saved	Score	CE Cost($)/QALY saved
325,000-2,600,000	5	Cost Saving
65,000-185,000	4	Cost saving-12,000
33,000-55,000	3	12,000-18,000
19,000-27,000	2	19,000-35,000
100-12,000	1	43,000-2,000,000

Coffield, AJPM, 2001

Priorities Among Services

Service	CPB	CE	Total
Vaccinate children	5	5	10
Tobacco cessation counseling	5	4	9*
Screen for colorectal cancer	5	3	8*
Cholesterol screening	5	2	7
Problem Drinking Adults	4	3	7*
Assess physical activity	3	1	4

Coffield, AJPM, 2001

Clinical Priorities

- Vaccinating children and health providing tobacco dependence counseling for patients are the top priorities for practitioners.

Coffield, AJPM, 2001

- In 1995, only 67% of smokers were identified, and only 21% were provided cessation counseling. Thus, practitioner behavior contributes to this gap.

PHS, 2000

Motivation & Health Behavior

- Motivation is human energy (psychological energy) directed at a particular goal
- Linking theories of behavior to health behaviors and outcomes is important in moving forward to close the treatment gap
- Self-determination theory has been used to study patient and physician adherence behaviors

Self-Determination Theory

- Autonomy — Autonomy support
- Competence — Competence support
- Relatedness — Relationship support
- Humans are innately motivated for health

Deci & Ryan, 1985

Self-Determination Theory

- Autonomous motivation involves people feeling fully willing to regulate their behavior
- Controlled motivation involves people feeling pressured by others or by themselves.
- Internalization is an inherent, proactive process by which controlled motivations are transformed into autonomous motivation

Deci & Ryan, 1985

Motivating Tobacco Dependence Counseling

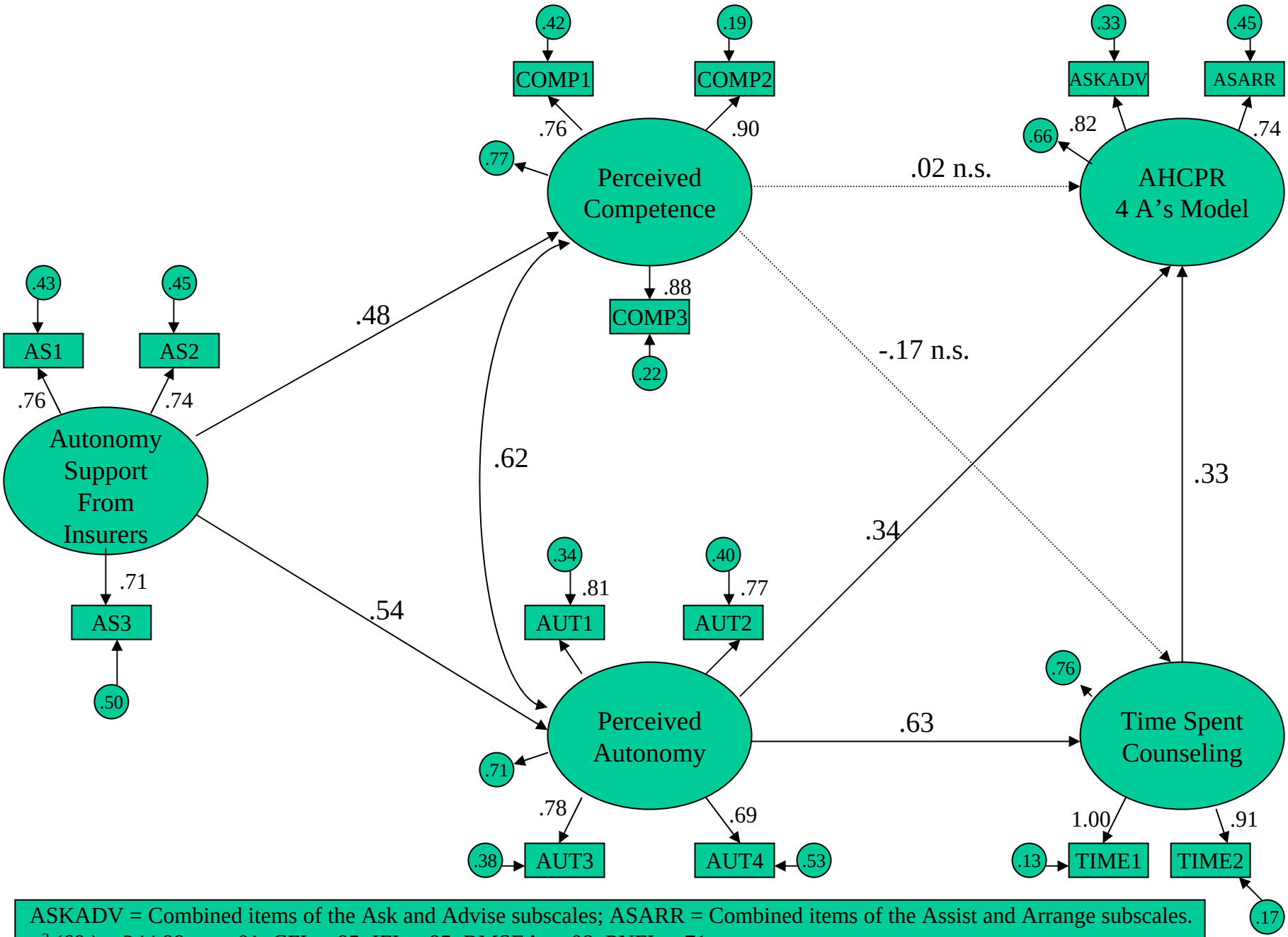
- HCP's (N=220) completed self-reports of their tobacco dependence counseling (4A's), autonomous and competence motivations, and autonomy support from insurers and instructors, before and 3 months after attending a tobacco dependence training workshop.

Williams, SRNT, 2002

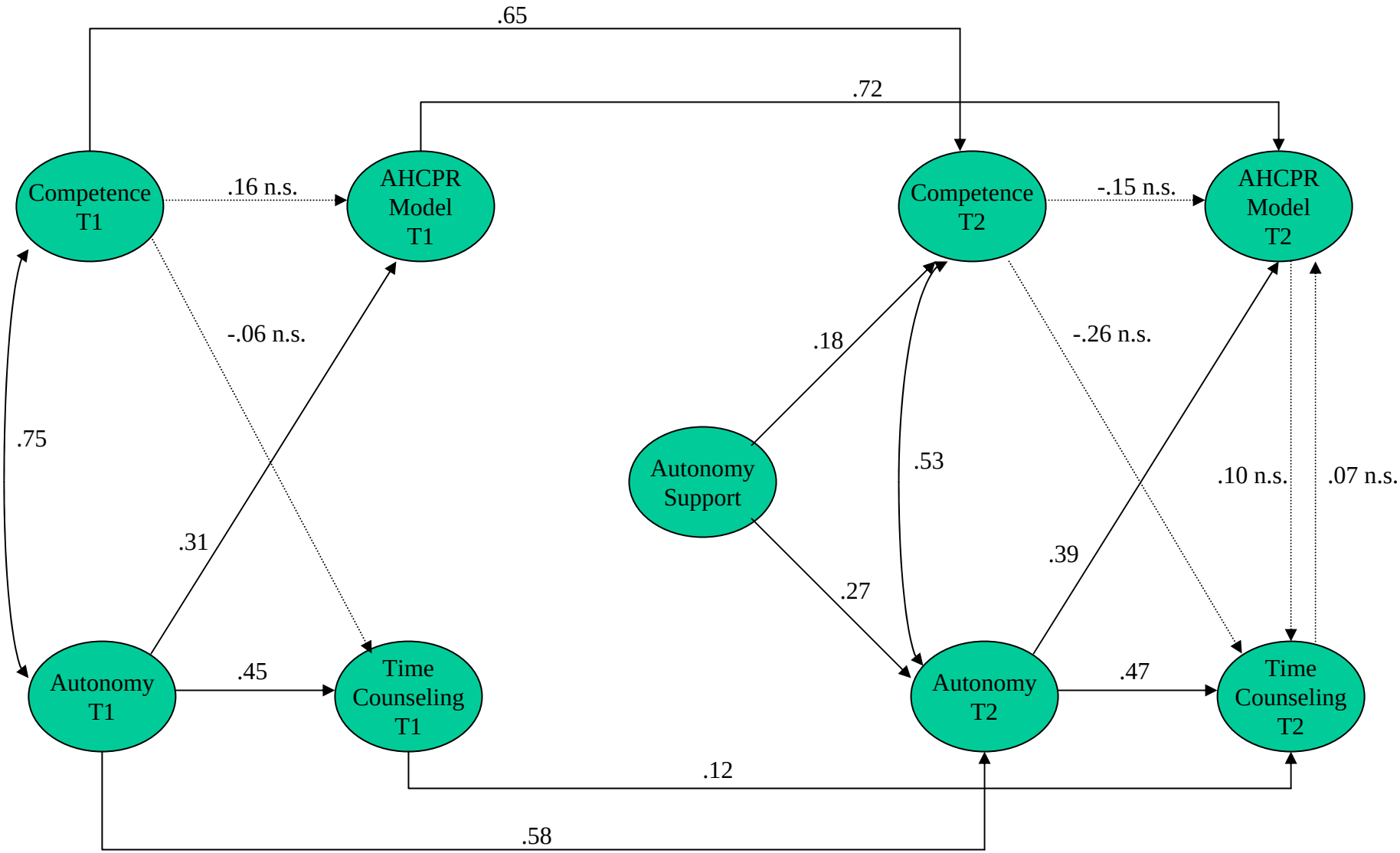
Results

- Autonomy supportive insurers predicted practitioners autonomy (γ = .54) and competence (γ = .48) for counseling
- Autonomy supportive instructors predicted increase in practitioner autonomy (β = .27) and competence (β = .18) over time.
- Change in autonomy strongly predicted change in the use of the 4-As (β = .39) time spent counseling (β = .47).

Williams, SRNT, 2002



ASKADV = Combined items of the Ask and Advise subscales; ASARR = Combined items of the Assist and Arrange subscales.
χ^2 (69) = 244.99, p < .01; CFI = .95; IFI = .95, RMSEA = .08; PNFI = .71



χ^2 = 657.35, p < .01, RMSEA = .07, CFI = .91, IFI = .91, PNFI = .74

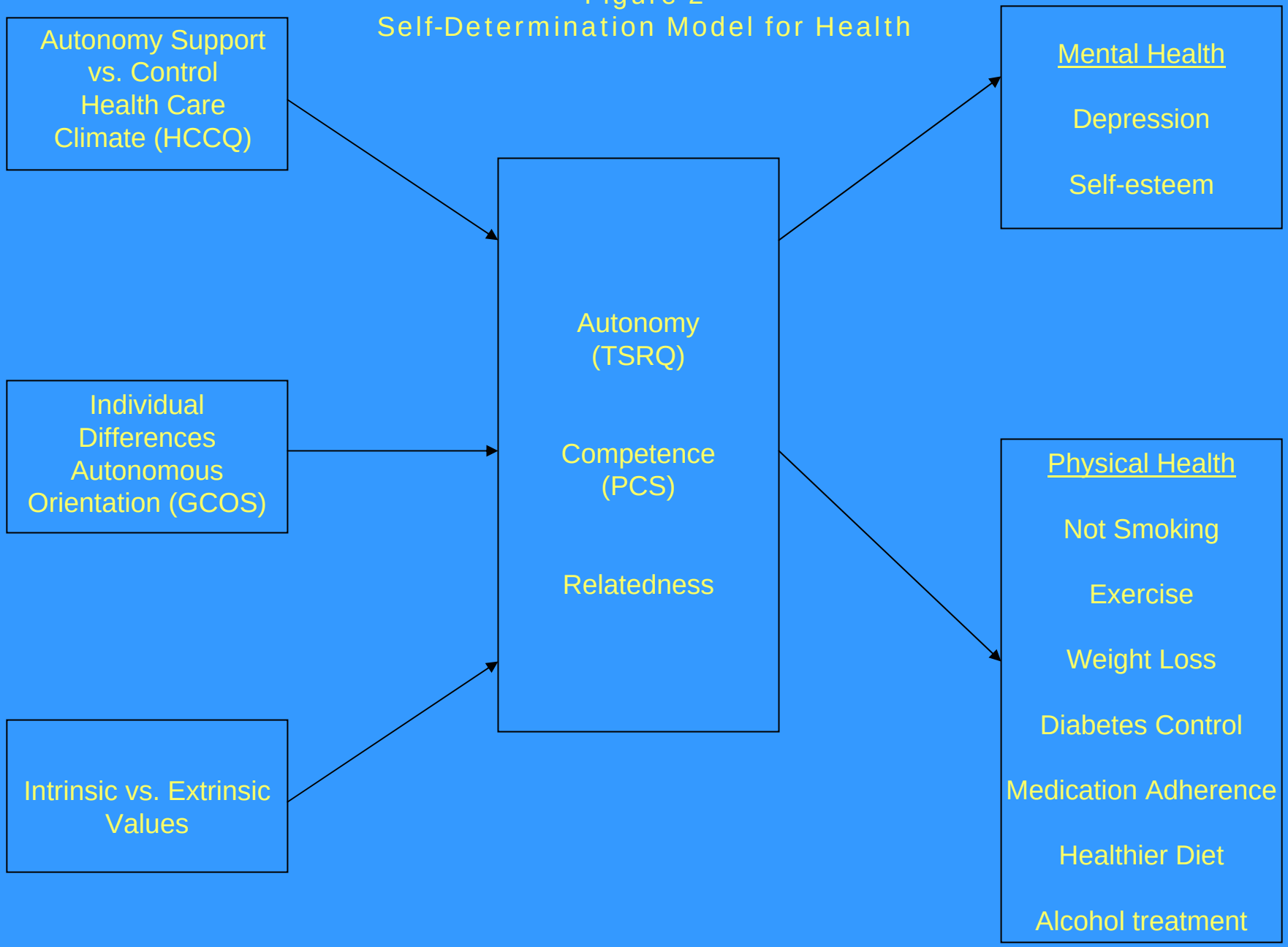
Conclusions

- HCP training for tobacco dependence counseling may need to support practitioner autonomy in order to be maintained over time, and thus narrow the treatment gap.

Perceived Autonomy and Patient Adherence

- Autonomous motivation is related to:
  - medical students counseling style (CV risk)
  - 2 year weight loss and appointments
  - completion of alcohol depend treatment
  - 30 month continuous abstinence from smoking
  - diabetes self-regulation
  - depressive symptoms, self-esteem
  - ADHERENCE TO MEDICATIONS

Figure 2
Self-Determination Model for Health



Perceived Autonomy and Adherence

- Past research with patient adherence to prescribed medications finds the same pattern for patient autonomy and behavior as for clinicians
  - Controlled motivation was not correlated with adherence to medications (r=-.10, p=ns)
  - Autonomous motivation was strongly correlated with adherence (r=0.58)

Williams, Health Psych, 1998

Perceived Autonomy and Adherence

- Medical ethics states patients need to be fully volitional about prescribed behaviors and medications before they should be expected to adopt them, but most are not.
  - Braddock (JAMA 1999), found <20% of 3552 audio taped medical decisions met criteria of being fully informed

Braddock, JAMA, 1999; Beauchamp, 1989

Perceived Autonomy and Adherence

- Adherence is typically defined as:
  - % patient behavior/ doctor's prescription

- SDT and medical ethics suggest the denominator needs to be altered to include patient autonomy:
  - % patient behavior/ prescriptions autonomously agreed upon by pt

Autonomy and Adherence

- The inclusion of autonomy in adherence may narrow the treatment gap because:
  - Fewer patients will be defined “non adherent” by limiting the denominator to those who are fully autonomous.
  - A greater emphasis will be placed on practitioners to more fully inform patients of risks and benefits
  - Patients and practitioners will be more motivated to adhere

Summary of Implications of Self-determination Theory and Adherence

- Closing the treatment gap may require policy makers to support practitioner and patient autonomy for relevant health behaviors

- SDT and ethics suggest adherence outcomes need to be defined to include patient autonomy